

ESSAYS IN INTERNATIONAL FINANCE

No. 77, December 1969

THE REFORM OF STERLING

BENJAMIN J. COHEN



INTERNATIONAL FINANCE SECTION

DEPARTMENT OF ECONOMICS

PRINCETON UNIVERSITY

Princeton, New Jersey

This is the seventy-seventh number in the series ESSAYS IN INTERNATIONAL FINANCE published from time to time by the International Finance Section of the Department of Economics of Princeton University.

The author, Benjamin J. Cohen, is Assistant Professor of Economics at Princeton University. He is the author of American Foreign Economic Policy: Essays and Comments (1968) and Balance-of-Payments Policy (1969), as well as of a number of articles in the area of international finance. His study on Adjustment Costs and the Distribution of New Reserves was published in 1966 as Number 18 in the series PRINCETON STUDIES IN INTERNATIONAL FINANCE. The present essay is part of a larger study which he is now completing, The Future of Sterling as an International Currency, and was written during the author's tenure as an International Affairs Fellow of the Council on Foreign Relations.

The Section sponsors the essays in this series but takes no further responsibility for the opinions expressed in them. The writers are free to develop their topics as they wish. Their ideas may or may not be shared by the editorial committee of the Section or the members of the Department.

FRITZ MACHLUP, *Director*
International Finance Section

ESSAYS IN INTERNATIONAL FINANCE

No. 77, December 1969

THE REFORM OF STERLING

BENJAMIN J. COHEN



INTERNATIONAL FINANCE SECTION

DEPARTMENT OF ECONOMICS

PRINCETON UNIVERSITY

Princeton, New Jersey

Copyright © 1969, by International Finance Section
Department of Economics
Princeton University
L.C. Card 75-110366

Printed in the United States of America by Princeton University Press
at Princeton, New Jersey

THE REFORM OF STERLING

What is the future of sterling? At present the pound is a great international currency—not so great as it used to be perhaps, but still second only to the dollar. At the level of private international transactions it functions globally as a vehicle, or trading, currency. At least a fifth of world trade is still invoiced and settled in sterling; in addition, a considerable amount of private wealth is still held in the form of sterling assets in London. The pound also functions as a reserve currency. However, at this level of international transactions its status is now largely regional rather than global. Since the Second World War the use of sterling as an official intervention and reserve medium has been confined almost entirely to the countries of the sterling area.

Should sterling be reformed—and if so, then to what extent and by what means? Should the pound continue to function as international money at both the private and official levels of international transactions, or should one or both of these roles be eliminated? Should the currency serve on a global scale or a regional scale? Should reform be unilateral or multilateral? These are the questions we shall be concerned with in the present essay. Our approach will be frankly national rather than cosmopolitan. The problem will be treated as an exercise in foreign economic policy. The desirability of any reform will be considered strictly from the point of view of the national interest of the United Kingdom itself.

From this point of view, many observers conclude that reform would in fact be desirable: for Britain, the costs of the pound's international functions are presumed to outweigh by far any benefits that may still happen to be accruing to the country. Benefits consist essentially of the sterling-related earnings of the City of London and of overseas investments. Costs include not only the payment of interest on the enormous "overhang" of sterling liabilities to foreigners; more importantly, they also include the constraint imposed by that overhang on the nature and timing of domestic full-employment policies. Accordingly, many alternative reforms have been proposed over the years by all kinds of experts. Yet for all the wealth of ideas expressed, there has been remarkably little consensus of judgment. If all the experts on sterling were laid end-to-end, they would still not reach agreement.

Proposals for the reform of sterling divide basically into two classes, according to whether or not it is thought that the currency should cease once and for all to serve as international money. One class of proposals

would terminate all of the international roles of the pound once and for all. It would be "domesticated": henceforth, it would serve only national monetary functions; it would survive only as purely domestic money. The other class of proposals would merely modify the pound's international roles. Proposals to "domesticate" sterling will be considered in the first section of this essay. Less dramatic reforms will be taken up in the following two sections. A brief final section will summarize the conclusions of the analysis.

I. THE END OF STERLING?

A Variety of Proposals

Should sterling be domesticated? Should it cease to serve altogether as international money? That is the common objective of a wide variety of reforms proposed over the years from all points of the spectrum of professional opinion. It is the objective, for instance, of schemes projected from time to time to fund the sterling balances by means of a long-term loan from, variously, the United States, the countries of the European Economic Community (EEC), the Group of Ten, the membership of the Organisation for Economic Co-operation and Development (OECD), the Commonwealth countries or sterling area, or the International Monetary Fund. Equally, it is the objective of schemes sometimes proposed which would integrate the British currency with some others, usually either with the American dollar or with the Common Market currencies. In either event, sterling holdings would be replaced by an alternative asset-reserve medium, and the pound presumably would no longer be used for any international purposes. Britain would be left with a consolidated long-term liability in place of the present mass of short-term debts.

Likewise, sterling could be domesticated in conjunction with a worldwide increase of the official price of gold. If the revaluation of gold were great enough, the United Kingdom could use its own windfall profits, plus some of the profits of others, to liquidate all outstanding sterling balances. Or it could switch to a floating rate for the pound, and in this way discourage the use of the currency for international purposes. Reform along either of these lines has frequently been proposed. Alternatively, the British might simply default on their obligations, by repudiating or confiscating the overhang of short-term liabilities. Action along these lines has not been seriously suggested. Still, it is a weapon that everyone recognizes the British could be forced to use *in extremis*. It would certainly ensure the end of sterling as an international currency.

The relative merits of these alternative reforms will be discussed at

length in the remainder of the present section. My position will be agnostic. I shall argue that none of the reforms can be seriously recommended as a genuine policy option for Britain. So far as the British are concerned, sterling *cannot* be fully domesticated. It may be quite desirable to *modify* the international roles of the pound; that we shall see in the next two sections. But it does not seem advantageous to try to *terminate* them altogether. The United Kingdom will be better off if sterling continues to serve as international money in some form.

The defect of these various reform proposals is that, basically, they are all quite unrealistic. If Britain is to wind up its international-currency business, someone must pay the cost of liquidation—either the British themselves or someone else. Schemes to fund the sterling balances, or to integrate the pound with some other currency, anticipate that the British would bear most of the burden. But given the size of outstanding balances, this, I submit, is an unrealistic expectation. Over the relevant time horizon the cost to Britain would actually be greater than the current cost of sterling as an international currency. It is not in the country's interest to press for reform along these lines.

Of course, the British would be happy to have someone else pay the cost of liquidation, if it could be arranged. This helps to explain the interest often aroused in the United Kingdom for proposals for gold revaluation, or a floating rate for the pound, or even default on the sterling balances. But these alternatives too, I submit, are unrealistic under current political and economic circumstances. The illusion that others can be made to pay is spurious; and besides, these proposals all have other critical deficiencies which seriously diminish their attractiveness as genuine policy options. In the real world, they are all nonstarters.

Funding the Sterling Balances

Proposals to fund the sterling balances began in 1945—almost as soon as the balances themselves came into existence as a result of Britain's overseas wartime expenditures. In the quarter century since, all kinds of variations on this theme have been played. One is the International Monetary Fund (IMF) variation: the balances would be taken over by the Fund in exchange for its own gold-guaranteed liabilities; and Britain would be left with a single consolidated long-term debt to be repaid gradually over a fixed period to maturity. This was the proposal, for instance, of Alan Day in his evidence submitted to the Radcliffe Committee in 1958; and in its *Report* a year later the Committee itself indicated qualified approval of the suggestion. Robert Triffin advocated IMF funding in his *Gold and the Dollar Crisis* (1960). In 1965 the idea received official support from the Italian Finance Minister at the annual

meeting of the International Monetary Fund. In 1968 it was advocated by a subcommittee of the United States Congress.

Alternatively, the sterling balances could be funded by a gold and dollar loan from other industrialized countries—from, say, the Group of Ten or the membership of the OECD. The loan could be arranged either directly or through the Bank for International Settlements. This variation was also mentioned by the Italian Finance Minister in 1965. A third variation was mentioned parenthetically by Professor Day—a long-term loan arranged on a European-Commonwealth basis. Sterling balances would be exchanged for the liabilities of a European-Commonwealth bank created expressly for this purpose. A fourth variation might be a loan arranged on a purely Commonwealth (or purely sterling-area) basis.

Proposals to integrate sterling with other currency systems are more recent in origin, beginning really just in the early 1960s, following Britain's first application to join the European Economic Community. Here, according to some observers, was an unparalleled opportunity for the United Kingdom, with help, to wind up its unilateral role in the international-currency business. Somehow the Six would be persuaded to cooperate in the liquidation of the pound. They might, for instance, help the British pay off the sterling balances by means of a long-term gold and dollar loan—a fifth variation on the funding theme. Alternatively, they might take over and manage the business themselves, promoting their own currencies as substitute asset-reserve media; or they might run the business jointly with Britain on the basis of a merged European currency—the “Europa,” perhaps. As a result of any of these, the pound itself would be eliminated as international money, and Britain would be left simply with a consolidated debt to its Common Market partners.

France's repeated vetos of British attempts to join the EEC have by no means destroyed enthusiasm in the United Kingdom for Common Market membership. However, they have had the effect of turning attention to other options as well—and in particular, to the option of some kind of North Atlantic Free Trade Area (NAFTA). This would be based essentially on a trade partnership between Britain and the United States. In addition, it would almost certainly include Canada and most of the other members of the present European Free Trade Association (EFTA), and perhaps Japan, Australia, and New Zealand also. As in the Common Market alternative, so here too, in the opinion of some observers, may be an opportunity for the United Kingdom, with help, to wind up its unilateral role in the international-currency business. Somehow Britain's NAFTA partners—and most especially, the United States—might be persuaded to cooperate in the pound's liquidation. Like

the Six, they could help fund the sterling balances by means of a long-term loan, or the United States could take over the business directly, or the partners could manage the business jointly on the basis of a common NAFTA currency.

Politically, these various proposals could hardly be more diverse. Some, like the NAFTA option, would perpetuate Britain's "special relationship" with the United States; others, like the EEC alternative, would terminate it. Funding sterling balances on a Commonwealth or sterling-area basis would maintain Britain's worldwide post-colonial ties and commitments; funding on an OECD or Group-of-Ten basis would imply a "little Britain" role in world affairs. Funding through the IMF would suggest a more congenial attitude toward supranational economic management than any of the other variations.

Conversely, in their economics the proposals could hardly be more uniform. They are essentially similar in both means and effects; only their details are different. For present sterling holders, the pound would be replaced by an alternative asset-reserve medium. For Britain, the present mixed bag of short-term liabilities would be replaced by a single consolidated debt of fixed maturity, to be repaid over a long period and at an agreed annual rate.

Superficially, the attractions of this kind of approach appear great. The problem of sterling would be solved once and for all. By a quick stroke of financial surgery, the sterling balances would be consolidated and excised, and a source of uncertainty in international monetary affairs removed. The cure would be neat, clean, and final. And yet it is impossible, in my opinion, to recommend the cure to the patient, for it is not in Britain's own interest. In addition to an already massive load of outstanding fixed-term obligations (quite independent of the sterling balances), the British would be called upon to shoulder a new burden of fixed debt considerably in excess of what it currently costs to maintain the pound as an international currency. From the British point of view, this kind of comprehensive reform just does not pay.

At the end of 1968, the total of sterling liabilities outstanding to all foreigners stood at approximately £7,650 million. Of this, the total of liabilities closely related to the traditional roles of the pound—including all private holdings, plus the official holdings of overseas-sterling-area countries—stood at approximately £3,400 million. At least this latter amount would have to be consolidated if sterling were to be completely funded or integrated with another currency. This would mean a minimum long-term borrowing expressed in dollars (since the loan would inevitably carry an exchange guarantee in dollars, if not in gold) of something over \$8 billion.

By any standard, this would be an immense burden of fixed debt. For Britain it would be almost too much to bear. Effectively, it would double the country's known outstanding fixed debts overseas. (These are detailed, as of the end of June 1969, in Appendix A.) In addition, in mid-1969 Britain owed substantial sums which were not officially disclosed, including drawings on central-bank swap facilities unofficially reckoned to be "on the upward side of £1,700 million" (\$4 billion) (*The Times*, July 12, 1969); and also drawings on the 1969 Basle sterling facility, which may have been as high as \$1.5 billion in early 1969. The United Kingdom has already been experiencing difficulty in servicing these various debts. The IMF standby arranged in June 1969, for instance, was designed not to increase the total borrowing available to Britain, but merely to enable the country to postpone for between two and five years the repayment of the final installments of Britain's 1965 credit from the Fund. The \$500 million immediately drawn was used at once to pay off some of the Bank of England's swap drawings from other central banks, which were all overdue.

An additional burden of fixed debt in excess of \$8 billion would thus come at a rather inopportune moment in British financial history. Appendix B provides some figures to illustrate the order of magnitude of the potential cost to Britain of a debt of these dimensions. Costs are calculated on an average annual basis, on the assumptions that (a) amortization installments would be of equal size, and (b) interest would be paid on the balance outstanding before each payment is made. A 10 per cent per annum rate of interest is the highest that Britain's creditors could reasonably be expected to charge. If the British were given only ten years to repay, this would mean annual installments averaging well over a half billion pounds a year; even if they were given 100 years, average installments would be almost £400 million annually. Of course, the cost would be correspondingly lower if the interest charge were reduced. But even at the nominal rate of just 2½ per cent per annum, and given 100 years to repay, the United Kingdom would have to meet installments averaging some £77 million a year.

This is no mean figure. Indeed, even this amount is probably in excess of what Britain would save yearly by funding the pound or integrating it with another currency. Available evidence suggests that current interest payments on the sterling balances, when adjusted for the sterling-related earnings of the City of London and of overseas investments, amount to something considerably less than any one of the figures included in Appendix B. In other words, over the period to maturity, the average annual cost to Britain of the additional debt burden of funding would actually be far in excess of what the country can save by the

proposed reform. To reduce the yearly cost below the current saving, even at the nominal interest rate of just $2\frac{1}{2}$ per cent per annum, Britain's creditors would have to agree to a repayment schedule stretching out to well over a full century in length. Indeed, even if they agree to forego interest altogether, they would have to wait two to three generations to be fully repaid on their loan. Such generosity is difficult to imagine: it would be unprecedented in the history of international finance. Yet any arrangement less generous than this just would not be in the British interest. Short of a very distant time horizon, the United Kingdom stands to lose less under present currency arrangements.

The reason why should be evident. Under present arrangements the bulk of the sterling balances are really rather stable. Only a relatively small proportion of the total tends to show any significant degree of downward volatility in the short term. Moreover, in the longer term outstanding balances are more likely to rise than to fall, as expanding international transactions and global wealth steadily increase the demands of sterling users for an exchange intermediary and store of value (offset only by a tendency on the part of users to switch from the pound to other international currencies). So long as the pound continues to function as international money, therefore, most sterling balances probably never will have to be repaid at all (on a net basis). However, if the sterling balances are funded, *all* of them in effect must be repaid: liabilities, most of which are tantamount to obligations of *indefinite* maturity and payment terms, would be transformed into a consolidated debt of *fixed* maturity and payment terms. Britain would now have to finance amortization payments as well as the cost of interest—besides losing the sterling-related earnings of the City and of overseas investments. No wonder this alternative tends to be the more expensive.

Because of this, it is sometimes suggested that the debt created by any form of funding operation should be made perpetual and nonredeemable rather than of fixed maturity. This idea is most often heard in connection with the IMF variation on the funding theme. Interest would be payable by the United Kingdom to the Fund, which would in turn pay interest to the one-time sterling holders who now hold a new type of IMF obligation; but nothing at all would be required of the British in the form of amortization of the outstanding principal. In effect, Britain's presently indefinite liabilities would be transformed formally into a consolidated obligation with a fixed maturity of infinity—into a kind of foreign-exchange "consol," as it were.

Naturally, this idea ought to appeal to the British, particularly if the interest cost of the exchange "consol" were to be set below the annual saving that would accrue from sterling's total nationalization. But it is

not a very realistic idea. The IMF as currently constituted is in no position to accept liability for some £3½ billion worth of convertible balances without new backing. It would need a grant of comparable magnitude from the remainder of its full international membership. Unfortunately, it is difficult enough to imagine Britain's potential creditors *lending* an amount like this for 40-100 years or more; it is virtually impossible to conceive of them actually *giving* such a sum away.

Alternatively, the Fund might be given the authority to issue *inconvertible* obligations in place of the sterling balances. However, this too is virtually impossible to imagine. True, the IMF now has the authority to issue Special Drawing Rights which, from its point of view, are in fact, if not in name, inconvertible obligations. (That is, the Fund itself incurs no liabilities when SDRs are created.) But the important point about SDRs is that *every* country gets a share of the allocation, in proportion to its current quota in the Fund. Everyone gets a slice of the cake: there are no special beneficiaries (except, perhaps, to the extent that Fund quotas themselves are suspected of being somewhat unrepresentative of the economic weight of various countries). But if, on the other hand, the Fund were to create additional inconvertible obligations (for example, a supplementary issue of SDRs) specially for the purpose of replacing the sterling balances, there would be only *one* immediate beneficiary—the United Kingdom itself. In effect, the British would be getting a free grant to pay off all of their short-term foreign liabilities. Once again, generosity on such a scale is difficult to imagine. Among other reasons, Britain's potential creditors fear the precedent that would be established by a funding of this kind: other countries might be tempted similarly to run up massive short-term debts, and then appeal to the IMF to be bailed out. All idea of "discipline," much favored by central banks, would be vitiated.

To be sure, there would be nothing to prevent the British from using their *regular* allocation of SDRs for the purpose of replacing the sterling balances. The amendment of the IMF Articles of Agreement incorporating the SDR scheme specifically permits any participant, "in agreement with another participant," to use its SDRs "to obtain an equivalent amount of its own currency held by the other participant" (Article XXV). Accordingly, in the long run all of Britain's short-term liabilities could be paid off in this way. But it should be noticed just how long in this event the long run would actually be. The first activation of the SDR scheme provided for an allocation of \$3.5 billion of SDRs in the first year, and \$3 billion in each of two subsequent years—in all, \$9.5 billion over a three-year period. At the same time, the British quota in the Fund (before the general and selective increases scheduled for 1970)

amounts to just a little over ten per cent of the total. The British share of the first three annual allocations, therefore, will come to less than \$1 billion. At this rate it would take Britain over a quarter of a century to fund just the sterling balances closely related to the traditional roles of the pound—to say nothing of other sterling balances or of the country's additional \$8 billion worth of fixed-term foreign debt. And this makes no allowance at all for adding to reserves or for financing potential payments deficits. Clearly, this approach takes us far beyond the time horizon relevant to the question at hand. The problem of sterling requires much more immediate attention than that.

Indeed, that is the difficulty with all of the proposals for funding the pound or integrating it with another currency: they all take us beyond the relevant time horizon. I have argued that, except in the unlikely event of unprecedented generosity, a consolidated long-term debt replacing the sterling balances would not be in Britain's interest: the country stands to lose less under present currency arrangements. But of course this is only over the period to maturity. Beyond that, the country stands to gain. However, 40-100 years or more is a long time to wait for benefits to begin; in most circumstances it is probably too long. Policy-makers in a representative democracy must show benefits rather more immediately—before the next election, if possible. Policy proposals, therefore, to be realistic, must usually accept the implicit constraint of a relatively short time horizon. The horizon itself may be elastic. It may be as short as next month or next year, or as long even as a decade. But only rarely can it be assumed to stretch out as far as a generation or more.

Until now I have ignored the matter of the constraint imposed by the overhang of sterling liabilities. The threat of reduction or withdrawal of liabilities adds to the independent constraint of the balance of payments on domestic economic policies: whenever a "run" on the pound develops, additional measures of deflation at home, or trade or capital restrictions, are required to protect the nation's gold and dollar reserves. This is also a cost of the international functions of the pound—a contingent cost, which may be quite considerable indeed. Taking this contingency also into account, it is possible that the burden of funding the pound or integrating it with another currency will not appear so unattractive after all. However, in the next sections we shall see that there are less expensive ways of dealing with this particular problem. The British need not assume such an immense additional burden of debt simply in order to avoid flight from the pound.

For that matter, they need not assume such an immense burden of debt in order to avoid any of the current net interest cost of sterling either. There are less expensive ways of dealing with this problem also.

Funding has its advantages, but not when applied to the total of sterling balances outstanding. As I have suggested, not all of the country's liabilities *need* to be funded. A partial funding might actually be more in Britain's own interest, even though leaving at least some balances intact. I shall return to this point in the next sections. It is one of the main reasons for my belief that the United Kingdom would be better off if the pound continues to be used for at least some international purposes.

Gold Revaluation

Gold revaluation frequently used to be urged as a solution of the general problem of international liquidity. If global reserves were inadequate, it was argued, then it was advisable to raise the official price of gold vis-à-vis all national currencies. This would not only increase the value of existing gold stocks; it would also induce dishoarding from private gold hoards, and would stimulate greater production from the mine fields of South Africa and elsewhere. Not surprisingly, the South African Government was among the most vocal proponents of this approach to international monetary reform. However, in other countries the idea received little official support. Governments recognized the inherent deficiencies of the approach: in the short run revaluation would be inflationary and highly inequitable; in the longer run, it would fail to provide for the steady growth of global reserves that was generally thought to be desirable. Nevertheless, for a time the idea generated considerable political controversy, thanks especially to the personal attitudes and utterances of Charles de Gaulle. However, eventually the whole issue grew somewhat obsolete—once official and private gold markets were separated by the two-tier price system in 1968, and then the IMF's new Special Drawing Rights were voted into existence. Today revaluation is not considered a serious or relevant policy option.

In the United Kingdom the approach used to receive support in a number of quarters, especially in the financial press. It was realized that although a rise of the official price of gold would be a multilateral operation designed to remedy a genuinely world problem, none the less Britain could expect to be one of the most important incidental beneficiaries. With reserves held mainly in gold and liabilities denominated mainly in sterling, the country stood to profit from any revaluation of momentary stocks. The idea was that the windfall gain could then be used to liquidate some part of the overhang of sterling liabilities—at the expense, it should be noted, of sterling holders (who would lose by holding sterling rather than the appreciating asset, gold).

Indeed, if the windfall gain were great enough, it could have been used to fund *all* of the sterling liabilities. By this means, gold revalua-

tion might have been a convenient *deus ex machina* for the total domestication of sterling (all at the expense of sterling holders). But of course for this purpose Britain's gold reserve alone, while large, was just not large enough. For example, at the end of 1968 monetary gold stocks of the United Kingdom stood at £614 million. At the same time the minimum amount of sterling balances outstanding to be funded stood at some £3,400 million—a ratio of approximately 5½:1. In order to pay off all of these liabilities by itself, Britain would have required a five-and-a-half-fold increase in the official price of gold (a rise of 450 per cent). This would have been far beyond anything even remotely dreamed of by the various advocates of revaluation. More commonly, they used to think of a doubling of the gold price, or at most perhaps a tripling. Yet anything as (relatively) small as this simply would not have been enough. Britain's own revaluation gain would not have sufficed to finance a liquidation of all the sterling balances.

Therefore, if a total domestication of sterling were the objective, it would have been necessary to mobilize not only Britain's own revaluation gain, but also the gains of other major gold-holding countries as well. Suppose the price of gold had been only doubled. Other countries would still have gained enough to make a loan to the British sufficient, together with Britain's own profit, to fund all outstanding sterling liabilities. The pound could thus have become a purely domestic currency, and Britain would have been left simply with a single consolidated long-term debt. Jacques Rueff was especially prominent in advocating this kind of solution for the problem of the sterling balances.

Certainly this kind of solution had the advantage of simplicity. Like the straightforward funding schemes already discussed, it would have removed the sterling problem once and for all, neatly and cleanly. However, also like the other schemes, it would have saddled the British with a burden of fixed debt that would be immense by any normal standard. The gold revaluation solution shared the same basic defect of the other funding proposals. To illustrate, suppose again that the gold price had been doubled at the end of 1968. Britain's own revaluation gain would have amounted to only £614 million (equal to the size of her monetary gold reserve). But since minimum balances to be consolidated amounted to some £3,400 million, a loan of roughly £2,800 million (\$6.7 billion) would have been required from other major gold-holding countries, out of their own windfall profits, in order to liquidate all of the outstanding sterling balances. Once again, extreme generosity would have been required on the part of Britain's creditors in order to hold down the annual cost of servicing such a debt. Otherwise, once again the reform just would not have been in Britain's own interest.

A Floating Rate for the Pound

What about letting the pound float? This alternative is often urged as a solution for the overall problem of sterling. Several advantages are claimed for it, in particular with respect to the process of balance-of-payments adjustment. If the rate for the pound were absolutely free to move, adjustment supposedly could be accomplished simply through variations in the price of foreign exchange. Accordingly, international reserves would be unnecessary to defend Britain's external economic position; consequently, the balance of payments supposedly would be removed as a constraint on independent domestic economic policies—and with it the threat of the overhang of sterling liabilities. Another advantage often claimed is that the rate for the pound could be unpegged unilaterally. It would not be necessary to wait for the rest of the world to agree to a coordinated move in the direction of multilateral exchange-rate flexibility.

Whether the decision were unilateral or not, a floating rate in all likelihood would eventually terminate sterling's status as an international currency. Conceivably, of course, that might not happen: the pound might continue to be used for at least some international purposes. But the opposite seems more probable. If the pound were allowed to float, it would soon lose most of whatever significance it still retains as an international currency. The majority of sterling holders would almost certainly begin to sell off their balances, in order to switch into dollars or other more stable asset-reserve media. Use of the pound for international purposes would shrink to a minimum.

A wholesale liquidation of sterling balances would mean a lower foreign-exchange rate for the pound. In turn, from the British point of view, this might be thought to imply the additional advantage of shifting some part of the cost of the pound's liquidation from the British to their creditors overseas. In fact, though, this advantage is more apparent than real. Today, the largest part of sterling liabilities outstanding are covered by exchange guarantees of one kind or another. Drawings on the IMF have always carried the Fund's usual gold-value guarantee. Now, in addition, liabilities incurred as part of central-bank swaps are also protected against a depreciation of the pound. Similarly, under the terms of the 1968 Basle reform (see below), the bulk of liabilities to official sterling-area holders too are subject to a guarantee expressed in dollar terms. Only privately-owned sterling balances still carry no formal guarantee of any kind. At the end of 1968 these amounted to less than £1,800 million—less than a quarter of the total of all balances outstanding.

In actual practice, therefore, only a small proportion of sterling liabilities could be fully liquidated simply by allowing the pound rate to depreciate. Most would still have to be paid off at their outstanding gold or dollar value—meaning, obviously, that they could not be paid off at all without a massive long-term loan from abroad. In other words, once again Britain would have to be saddled with an immense burden of fixed-term debt (payable, moreover, at fixed rates of exchange); once again, extreme generosity would be required on the part of the country's creditors in order to make the consolidation of obligations worthwhile. The solution contains the same basic defect as all other variations on the funding theme.

Nor is this the only defect of the floating-rate solution; there are other deficiencies as well. Absolute exchange-rate flexibility would not necessarily accomplish all that is claimed for it as a balance-of-payments adjustment mechanism. On the contrary, adjustment might actually be more difficult than it is now if private speculation in the exchange markets turned out to be destabilizing rather than stabilizing. Moreover, a floating rate might actually reduce rather than promote foreign trade and investment, by emphasizing uncertainties about the near-term future. Forward markets can compensate for the risks of single transactions, but they cannot compensate for the absence of a fixed frame of certainty in the medium run which is so essential to the calculations of traders and investors. There is no need to rehearse all of the objections to flexible exchange rates here; they have been elaborated enough elsewhere. Suffice it to say that they are serious—sufficiently serious, in my opinion, to rule out the idea altogether as a genuine policy option. The approach receives hardly any support at all in official or banking circles.

Many of the deficiencies of freely flexible exchange rates would be corrected by alternative proposals for either "wider bands" or "crawling pegs"—or some combination of the two. These approaches receive considerably more support in official and banking circles. However, as far as the sterling balances are concerned, the same defect remains: funding would be required on a scale that would burden Britain with the same impossible load of fixed long-term debt (payable at fixed rates of exchange). Therefore, insofar as the problem of the sterling balances is concerned, the same objections apply to these variations as well.

Default

One last alternative to consider is default. The United Kingdom could, by unilateral action, just repudiate or confiscate all of its foreign liabilities. This would immediately spell the end of sterling as an international currency: no one would ever voluntarily accumulate wealth in

the form of pounds again; and in turn this would discourage the currency's use for trading purposes as well. This would also be the simplest way of making someone else pay the cost of liquidation. The losses would be borne directly by the individuals and governments that, trusting the convertibility pledge of the British Government, have until now continued to hold the pound for store-of-value purposes.

However, it is obvious that sterling holders are hardly likely to accept such losses without a fight. More probably, they would attempt to recoup the cost of liquidation by any means available. Consequently, by its unilateral action the United Kingdom would be exposing itself to the risk of all manner of retaliation from abroad. For example, British exports might be boycotted or subjected to discriminatory restrictions; likewise, imports might be withheld at the source or embargoed. For a country as dependent on trade as Britain, a commercial war could be disastrous. Alternatively, British foreign assets and investments might themselves be repudiated or seized. Britain is a creditor nation internationally: total assets overseas exceed total liabilities by nearly £2 billion. The country stands to lose much more than it might gain from any cutthroat competition of this sort.

For precisely these reasons, no one seriously proposes default as a deliberate policy measure for the United Kingdom. It would be suicidal. To be sure, as I suggested at the start of this section, it is an action that Britain could be forced to *in extremis*—say, by the heavy burden of its outstanding fixed debts, or by a severe and prolonged crisis of the balance of payments, or by a general breakdown of the international monetary system. Under such conditions there might be no alternative to a repudiation of the country's liabilities. However, this would represent the ultimate failure of policy, not a conscious choice among options. So long as other alternatives are available, default must be rejected as a solution for the problem of sterling as an international currency. The potential risks and costs are just too great to contemplate.

II. THE BASLE FACILITY OF 1968

If sterling cannot be fully domesticated, then it must continue to be used for at least some international purposes. The real issue for the British is not whether the international functions of the pound ought to be liquidated; the problem is rather whether they ought to be modified. The logical starting point for any possible modification of sterling is the so-called Basle facility of 1968. This arrangement, together with the associated bilateral agreements between Britain and the countries of the overseas sterling area, constitutes the most significant reform of the pound to date. It was announced in September 1968 and fully described

in a U.K. Government White Paper a month later (*The Basle Facility and the Sterling Area*, Cmnd. 3787, October 1968).

The reform consisted of three parts. First, the central banks of twelve major industrial countries agreed to provide Britain with a \$2 billion standby credit through the Bank for International Settlements to finance any further net withdrawal of sterling-area balances. Private as well as official balances were covered. The facility was to have a ten-year life, with drawings to be permitted during the first three years (1968-1970). Repayments were to be made between the sixth and tenth years (1973-1977).

Secondly, the United Kingdom guaranteed "to maintain the dollar value of eligible official sterling reserves of sterling area countries" (Cmnd. 3787, para. 17). The guarantee applied to all of each member's reserve balances in London except for a portion equal to ten per cent of its total reserves. (In other words, ten per cent of each country's total reserves would henceforth be held in the form of unguaranteed sterling.) In the event of any future devaluation of the pound vis-à-vis the dollar, each country would receive a payment in sterling to restore the dollar value of the guaranteed portion of its reserves. The guarantee did not extend to private sterling-area holdings of pounds.

In return for the guarantee, there was only one counterpart concession on the part of sterling-area members: each country pledged to keep not less than an agreed percentage of its total reserves in sterling. This was the outer area's *quid pro quo*. "The guarantee is conditional on each country maintaining at all times a Minimum Sterling Proportion in its reserves" (Cmnd. 3787, para. 19). The precise proportion in each case was arrived at through negotiation. Terms were set out in bilateral agreements between Britain and overseas members which were to remain in force for three years, with a provision for extension for a further two years by mutual agreement.

When the reform was announced, many observers jumped to the conclusion that the domestication of sterling was at hand. It was presumed to be only a matter of time before the pound would cease altogether to perform any international functions. "The purpose of the scheme is the gradual withdrawal of sterling from its reserve role," *The Times* reported bluntly; and *The Economist*, equally forthrightly if not a bit more nostalgically, described it as "the end of the old sterling area." But *was* this the end? Certainly the arrangement is a landmark—indeed, a watershed—in the history of sterling; and certainly in the long run it could really lead to a gradual withdrawal of functions. But in the shorter run, and particularly in immediate impact, Basle is far from the end of an international money. In fact, its ultimate implications are quite ambig-

uous. As Richard Gardner has recently written (*Sterling-Dollar Diplomacy*, revised edition, 1969):

Was this a step toward perpetuating or terminating the sterling area? One could not be sure. . . .

Consider some of the details of the arrangement. The standby credit is nothing less than a medium-term funding facility. However, in all it amounts to just \$2 billion—under one-third of the total of liabilities to the overseas sterling area outstanding in 1968. This is hardly sufficient to fund the whole mass of sterling-area balances. Of course, it could be a start in that direction. But then, what about the balances held outside the sterling bloc? No provision at all was made for these liabilities: the roles of the pound outside the region were completely unaffected by the scheme.

Similarly, the term of the credit facility of the Bank for International Settlements (BIS), as well as of the associated bilateral agreements between Britain and the members of the overseas sterling area, amounts to just three years (plus the additional two-year renewal option). This is hardly sufficient time for the end of anything, let alone the decades-old sterling area—though, once again, of course, it could be a start in that direction.

Most importantly, there is the provision for the Minimum Sterling Proportion (MSP)—the necessary condition for overseas eligibility for the exchange guarantee promised by the United Kingdom. This is hardly consistent with an ambition ultimately to terminate the sterling area. On the contrary, it seems rather more consistent with a desire to perpetuate it. The exchange guarantee provides an incentive for overseas members to continue to use the pound for reserve and intervention purposes; the MSP provides an assurance that they will in fact do so. The effect could well be to *maintain*, rather than eliminate, the international functions of the pound—at least at the level of official transactions within the sterling region.

The U.K. Government itself has apparently been of two minds on the subject. Roy Jenkins, Chancellor of the Exchequer at the time the Basle arrangement was negotiated, is reported to be determined to end sterling's status as an international currency; "an anachronism from a different world," he is said to have called it before a meeting of Labor Party Members of Parliament (*The Times*, May 20, 1969). Yet when the Treasury's own White Paper on the scheme was issued in October 1968, it took another attitude entirely:

Sterling's role in the international monetary system has not expanded over recent years. In proportion to world reserves and world

trade it has indeed contracted, and in 1968 it has contracted in absolute terms also. *But it will continue in the future as a major part of the international monetary system.* (Cmnd. 3787, para. 23; italics supplied.)

Thus, Professor Gardner seems to be quite correct: one *cannot* be sure. The most that can be said with certainty about the Basle arrangement is that it is a *reform* of sterling. What its ultimate meaning will be has yet to be decided.

As a reform of sterling, the Basle scheme established three important precedents. These were, first, the exchange guarantee itself; second, the principle of limitation on the rate of withdrawal of sterling balances (the MSP); and, third, the funding of sterling balances on a partial and self-qualifying basis. All three provide an organic basis on which to build further reforms in the future.

The Exchange Guarantee

The idea of an exchange guarantee for the sterling balances was an old one: observers for years had urged the British Government to consider it as a means of countering the ever-present threat of the overhang. Some balances have always been potentially volatile in the short term; in addition, their very existence has tended to induce or aggravate speculative movements of other types of funds. The reason, of course, was the fear of devaluation. By comparison with holders of dollars or gold, holders of pounds stood to sustain a windfall loss if the parity of sterling were lowered. Their international purchasing power would have been reduced. Consequently, they tended to flee from the pound at every crisis of confidence. But according to the proponents of exchange guarantees, all that would have been changed had the United Kingdom agreed to maintain fully the exchange value of its liabilities in the event of devaluation. Then, if parity had happened to be lowered, sterling holders could have been expected to be compensated *in toto* for their losses. Accordingly, they would no longer have had any incentive to flee in moments of strain. So far as they were concerned, devaluation would have been an irrelevant issue. As a result, the overhang of balances itself would finally have been stabilized.

The advantages of an exchange guarantee, proponents argued, were therefore obvious. By agreeing to the idea, Britain could in some circumstances avoid a devaluation of the pound—or at least reduce the extent or postpone the date of devaluation—since it would not then be necessary to lower the sterling parity solely because the central reserve was threatened by speculative capital outflows. On the other hand, if devaluation

were judged to be the appropriate balance-of-payments policy in a given situation, it could be initiated effectively without the usual air of crisis and weakening confidence. These were strong arguments. Nevertheless, successive British Governments traditionally opposed the idea of a guarantee on principle—on several principles, in fact.

In the first place, the Government doubted whether a guarantee could be made sufficiently *credible*. Other governments had been known to renege on similar commitments: the United States, for instance, had abrogated gold clauses in 1933. Who would accept that the United Kingdom might not, at some moment of strain, attempt to do likewise? Besides, Britain's short-term liabilities were already far in excess of its gold and dollar reserves; cover was already inadequate. A promise to compensate sterling holders might therefore just not be believed.

As a matter of fact, it is true that guarantees must be credible to be effective. However, it is not true that they are automatically subject to suspicion merely because of some dusty historical analogies. The British Government did itself little good by always casting prospective doubt on its own integrity. And as for the matter of inadequate cover, this was simply a red herring. A commitment to compensate sterling holders in the event of devaluation would not have required the British actually to pay them off in gold or dollars. On the contrary, it would have required them only to *maintain the value* of sterling holdings in terms of gold or dollars—in other words, to write up the exchange worth of balances in proportion to any devaluation that might occur. This was a different matter entirely. Since most sterling balances tended never to leave Britain at all (on a net basis), little additional pressure would have been exerted on the central reserves (though of course the overhang of liabilities would have been increased). With its terms clearly understood, a guarantee could easily have been believed. (Certainly the Basle guarantee has been believed.)

A second Government objection to the idea of a guarantee was that full compensation would actually give sterling holders a greater real value for a devaluation than they had had previously, in terms of what they would then be able to buy in the United Kingdom or in other currencies devalued *pari passu* with the pound. In effect, full compensation would be "over-compensation": the purchasing power of sterling holders would in fact be increased.

Technically, this argument was quite correct. To counter it, proponents of a guarantee sometimes suggested that compensation be partial instead of total—or, alternatively, that sterling holders forego or remit some part of their interest earnings. However, in fact this was beside the point. The real issue was what the purchasing power of sterling holders would

have been if, rather than remaining in pounds prior to a devaluation, they had switched into gold or dollars or some other nondevaluing currency. By that comparison their purchasing power would be no greater as a result of full compensation by the United Kingdom. They would not be receiving "over-compensation"; they would simply be avoiding a windfall loss (which would otherwise be a windfall gain for Britain).

Does this mean that there is no valid argument for partial compensation (or for its equivalent—partially foregone interest)? Not at all. There *is* a valid argument, but it must be based on different considerations. Rates of interest in London generally tend to be higher than in most other financial centers. Consequently, net yields on sterling balances generally tend to be significantly higher than returns on most other asset-reserve media—and certainly higher than on gold, which pays no interest and for which in addition there are storage costs. Central banks and others customarily draw a rigid distinction between current income, on the one hand, and capital gains and losses, on the other. However, this is essentially an accounting convention: in economic terms current earnings and capital revaluations are identical insofar as their impact on the balance sheet are concerned. The British can thus legitimately insist on regarding them as functional equivalents. In the event of devaluation, for instance, they might deduct from the sum of compensation to overseas creditors an amount equal to some or even all of the excess yield on sterling balances previously earned. Or, alternatively, since the former approach could lead to flights from sterling just prior to any suspected devaluation, the United Kingdom might, in return for a guarantee of full compensation, ask overseas creditors to forego or remit some or all of their current excess of interest earnings. Either alternative would be partial compensation in a technical sense; but both would be full compensation in an economic sense. Over the long term, by comparison with holders of dollars or other asset-reserve media, sterling holders would sustain no loss of international purchasing power. They would be no worse off than anyone else because of devaluation. But neither would they be any better off than anyone else because of the high interest rates they happened to be earning in Britain.

The final Government objection to the idea of a guarantee was, simply, that it would be too expensive. True, it would cost nothing so long as the sterling parity remained unchanged; but, if on the other hand the pound were devalued, then the cost would be substantial. This argument too obviously was correct—yet it too was beside the point. The contingent cost of compensation could not be considered in isolation. The real issue was to compare that cost with the contingent cost of the sterling overhang, reflecting the danger of a rush on the pound. The latter cost, itself

quite substantial, would be diminished if not wholly eliminated by the initiation of an exchange guarantee. Viewed in this light, the potential expense of compensation was not nearly so great as the British Government traditionally maintained.

Actually, despite its objections in principle, in practice the British Government was not nearly so consistent in its opposition to the idea. In fact, guarantees were gradually extended, first to one category of balances, then to another, so that by the time of Basle the proportion of liabilities that had still not been subject to compensation at one time or another was really comparatively small. The precedent established in September 1968 was more one of manner than of substance.

For instance, as long ago as 1944 the British agreed at Bretton Woods to the principle that all IMF drawings, as well as subscriptions, should carry a gold-value guarantee. Similarly, in 1949, following the first post-war devaluation of the pound, the country undertook to pay compensation totalling £75 million on sterling balances held outside the sterling area under various bilateral-payments agreements. And in 1958 it accepted the requirement of a guarantee for central-bank holdings in the European Monetary Agreement (EMA). In 1963 this last was limited to working balances only, but at about the same time the principle of guarantee was adopted as an integral part of the network of swap facilities then being constructed by the major central banks. Most interestingly, in 1964, the United Kingdom began to experiment with intervention in the forward-exchange market, providing *private* sterling holders with what amounted to an *informal* exchange guarantee, in the form of a kind of officially subsidized insurance. This experiment was terminated, however, after the second postwar devaluation in 1967.

Thus, by 1968 Britain had already had a variety of experience with different forms of exchange guarantees. What was new about the Basle arrangement was that, for the first time, the principle of compensation was introduced formally *as a reform of sterling*. This had not been true of previous arrangements. Guarantees under the IMF, the EMA, and the swap network between central banks had all been incidental to the functioning of the pound as an international currency; their primary purpose had been simply to ensure short-term support, whenever necessary, for the British balance of payments. Likewise, the informal guarantee provided by forward intervention was supposed to be designed for balance-of-payments purposes only; no intention to reform the roles of sterling was ever acknowledged. But as we know, the guarantee promised at Basle was most definitely supposed to be part of a reform of the roles of sterling—at least at the level of official transactions within the sterling region. This was a radical departure indeed.

As a matter of fact, in the opinion of some observers the departure was perhaps rather *too* radical. The terms of the guarantee were much too generous, it was said; some additional counterpart concession ought to have been extracted from the sterling-area countries (apart from their single commitment to maintain a MSP in their reserves). As one Member of Parliament expressed it:

All save a small proportion of sterling balances which are retained will in future be guaranteed against exchange rate fluctuations, while continuing to enjoy an exorbitant rate of interest. It is rather as if the Government had offered holders of War Loan both a guarantee of the current yield on their holdings and a floor price at the present market level. There is not much incubus-shedding about that.

Indeed, there *is* not much "incubus-shedding" about that. I agree that from Britain's point of view the terms of the guarantee *were* too generous. However, I also believe that in principle the general case for guarantees is a strong one. Furthermore, it is important to remember the situation in which the particular guarantee included in the Basle package was negotiated. In 1968 the British had their backs to the wall; they had little choice in the matter. Sterling-area governments were fleeing from the pound and something had to be done. In 1973, on the other hand, by which time the arrangement must be renegotiated (assuming the two-year renewal option is exercised in 1971), it is hoped the situation will be somewhat different. The British should not be negotiating in quite the same atmosphere of crisis. Consequently, they should have more choice about the terms of any further guarantees in the future. A useful precedent has now been established; in my opinion it would be a waste not to build on it. But as I shall indicate below, it seems to me that the British can reasonably argue for a better deal for themselves.

The Minimum Sterling Proportion

I have emphasized that in principle (though not always in practice) the British Government was traditionally opposed to the idea of any guarantee of the exchange value of sterling liabilities. Yet in the opinion of many observers it was hardly possible either, as the only alternative, simply to ignore the threat of the overhang. It was not enough merely to offer attractive interest rates and hope for the best; some other means had to be found for countering the risk of flights from the pound. One alternative often suggested was that the United Kingdom negotiate some form of limitation on the rate of withdrawal of balances. Either some portion of outstanding liabilities might be blocked; or else

a ceiling might be imposed on the amount by which they could be drawn down in any single year. Once again, the advantage would be the stabilization of the ever-threatening overhang.

However, the British Government was traditionally opposed to this idea also. Any limitation on the rate of withdrawal of balances, it was argued, would cast doubt on the credibility of Britain's convertibility pledge, which was so essential to the continued functioning of the pound as an international currency. Indeed, it would run counter to the entire tenor of British exchange policy, which before 1958 was directed toward enhancing the convertibility of sterling, and after 1958 toward preserving it. A step of this kind would be just too detrimental to foreign confidence.

Nevertheless, in 1968 a step of this kind was taken, with the introduction of the Minimum Sterling Proportion. This provision—the *quid pro quo* for the new exchange guarantee from the United Kingdom—clearly limited the rate of withdrawal of balances by governments in the overseas sterling area. In effect, it turned the clock back to the late 1950s, when sterling-area members still customarily maintained a generally constant percentage of their official reserve assets in London. After about 1961, by contrast, members had begun to diversify out of pounds. The percentage of sterling in their reserves declined, though until devaluation in 1967 their balances in absolute amount remained fairly steady; after devaluation, even in absolute terms overseas reserve balances began to decline. The MSP, however, put a stop to all that. Henceforth overseas reserve balances may decline only in proportion to decreases of total reserves of a sterling-area member (assuming the member desires to remain eligible for the British exchange guarantee). As a matter of fact, they must actually rise if the member's total reserves are rising. Governments in the overseas sterling area may no longer diversify out of sterling at will.

Significantly, foreign confidence was not shaken by the MSP provision; on the contrary, it was reinforced. True, some governments in the overseas sterling area were a bit unhappy about the limitation on the transferability of their sterling reserves. But they soon realized that the limitation was more apparent than real. In fact, the only constraint on their behavior was that they use sterling in fixed proportion with other reserve assets (gold, dollars, etc.) in the settlement of payments imbalances. This was hardly a major inconvenience. Moreover, even they could see that it was in their common interest to stabilize a portion of the overhang of British liabilities. For Britain, therefore, the threat of sudden withdrawals was reduced: from the British point of view the precedent was an extremely useful one. I see little reason why it should not be possible to extend the principle in the future.

Funding

A third alternative means of countering the threat of the sterling overhang was the idea of funding. Proposals along these lines were traditionally opposed by the British Government. Its customary reasoning was summarized cogently in a recent article in *The Banker* (Malcolm Crawford, "Funding the Sterling Balances," July 1968):

The Treasury and the Bank of England have been far from eager to pursue ideas of funding overseas holdings of sterling. Their (unpublished) thinking has been roughly this: the sterling balances have posed a potential threat to Britain's reserves, and this threat may even at times have prevented the Government from pursuing rational policies, for fear of a run on sterling; but we do not now have a choice between having the sterling balances or not having them—it is a question rather of relatively more or less onerous terms on which they (or a part of them) could be disposed of. It would make little sense to exchange balances, which may well remain intact, for an obligation to make fixed repayments over a period of years—especially at a time when we already have heavy fixed-term repayment obligations falling due for several years ahead. And anyway, the magnitude of the problem made it a pipe dream.

I agree of course with the Government's reasoning: funding *is* a pipe dream if the idea is to consolidate *all* of the overseas holdings of sterling. But what about the alternative idea of a partial funding of sterling liabilities? That, I have already suggested, might actually be more in the British interest. After all, why *not* leave untouched those balances which may well remain intact anyway? Let sleeping dogs lie. There is no need to liquidate liabilities that are already tantamount to obligations of indefinite maturity. On the other hand, there are, as we know, also numbers of creditors who may well wish to run down some or all of their sterling holdings, if not immediately, then at the first hint of crisis. These are truly obligations of definite (short-term) maturity—liquidations that must in any event be financed. But in that case why *not* make use of a longer-term loan, in order to stretch out the structure of the country's external debt? The balance of advantage would be all in Britain's favor.

Unfortunately, the idea of partial funding hits a snag on the problem of identification. Just how can one tell which balances are likely to remain intact, and which are not? In a 1966 debate Robert Roosa put the question to Fred Hirsch (Robert V. Roosa and Fred Hirsch, *Reserves, Reserve Currencies, and Vehicle Currencies: An Argument*, Essays in International Finance No. 54). Hirsch answered it in the only way possible:

Well, put that way, you never can tell. You never can identify the potentially troublesome balances in advance, any more than you can ever identify in advance which particular banking depositor is going to rush to the door first. You can not tell; all you can say is that there are these nervous banking depositors and at any given time they are in danger of all storming the door at once. And the very fact that they are in danger of all storming the door, even if they do not actually get there, worries other people, and adds to the trouble of the situation. This is not fancy; it is very recent London history. Therefore, what I think one must do is have an open-ended possibility for any of these banking depositors. . . . Personally, I would make this entirely voluntary and open-ended; and in that way, to use your terms, create a self-qualifying situation.

Significantly, this is precisely the principle that was incorporated into the Basle arrangement of 1968. Although offered an incentive to remain in sterling (the exchange guarantee), sterling-area members retained the right to run down their holdings if they so wished; and the \$2 billion standby facility was arranged to finance any consequent net withdrawals from London. At long last, despite previous British Government opposition, the precedent of funding was established. However, no drawings on the credit facility need ever be made unless sterling holdings are in fact withdrawn, and no holdings will ever be run down except on a genuinely voluntary basis. Thus, funding in fact was established in terms that were both partial and self-qualifying. Here was a third precedent on which to build organically in the future.

III. THE REFORM OF STERLING

Reserve Currency

No argument can be made for *reviving* the role of the pound as a reserve currency outside the sterling region. There is just no incentive for it—either from the point of view of nonsterling countries or from the point of view of the British themselves. A currency is unlikely to be adopted generally for official intervention or reserve purposes unless it already is used widely as a private vehicle currency. The pound, though, outside the sterling area, is not used at all widely any more for trading purposes; the dollar is therefore rather more convenient than sterling as an intervention medium. Likewise, the dollar is rather more convenient than sterling as a reserve medium, principally because it is more directly (and credibly) gold-convertible. Nonsterling countries would have an incentive to accumulate pounds voluntarily only if they were given the same exchange guarantee as countries of the sterling

area. However, for this the *British* have no incentive. True, in the short run voluntary acquisitions abroad would generate seignorage benefits at home. But in the longer run they would inevitably burden Britain with the same net costs as have previous accumulations. A renaissance of sterling as a global reserve currency would not be in Britain's interest.

What about a renaissance of sterling as a *regional* reserve currency? The same argument applies here also: there are no incentives for this possibility either. The mutual ties of trade, finance, and politics on which the sterling area was originally based have gradually withered away in recent decades. It is therefore unlikely that many overseas members would now welcome an effort to reverse the trend toward diversification of their international monetary relationships. Nor would it be in Britain's interest to sponsor such an effort. In the longer run the net cost would inevitably be high.

From Britain's point of view, the preferable alternative would be to sponsor a gradual *reduction* of the sterling-area role of the pound at the level of official international transactions. Total elimination is out of the question. However desirable domestication might appear—whether by funding or by any of the other means discussed previously—over the relevant time horizon its cost would be even higher than the cost of the pound's official functions at present. In this regard the British have no choice: these roles must continue. But, on the other hand, they need not continue at the same rate: they could be reduced. In this regard the British *do* have a choice. Partial elimination of sterling's intervention and reserve functions would not be at all impractical, and could actually generate significant savings for the United Kingdom. The costs of these functions are unlikely to disappear, but they could be minimized. The basis for reform would of course be the 1968 Basle arrangement.

The Basle arrangement has worked remarkably well. The flight from the pound by sterling-area official holders in 1968, which had been gathering steam from the first quarter, after September was very quickly curtailed by the MSP provision: effectively, much of the threat of the overhang of liabilities was fully neutralized. Even more importantly, the exchange guarantee actually created an incentive for a return flow of funds. By the end of the first quarter of 1969, sterling-area reserve balances in London were even greater than they had been a year earlier. Few calls have had to be made on the standby credit arranged through the BIS.

Obviously, nothing succeeds like success. Accordingly, nothing ought to be done to reverse the gains that have been wrought by the Basle arrangement. The standby credit and associated bilateral agreements between the British and overseas sterling-area members ought to be

renewed when their term expires in 1971; if possible, in order to maximize its effectiveness, the whole scheme should be made into a permanent rather than an *ad hoc* feature of the overall sterling system. This would minimize the burden for Britain of the official roles of the pound (which, I have argued, they have no choice but to continue anyway). However, in at least two respects changes in the Basle scheme are possible that would be more to Britain's advantage. One modification concerns the terms of the exchange guarantee on sterling-area reserve balances; the other concerns the nature of the funding facility provided through the BIS.

I have already suggested that so far as the British are concerned, the terms of the Basle exchange guarantee are rather too generous. Overseas sterling-area countries now enjoy both stable capital value and exceptionally high interest rates on their balances. Yet no *quid pro quo* was extracted from them in return, apart from the MSP provision, and that, I have argued, is hardly much of an inconvenience. In my opinion, the outer members could reasonably be expected to pay a much higher price for their guarantee than they do now. The additional concession ought to be negotiated before the arrangement is renewed in 1971.

Conceivably, the concession might take the form of an agreement for partial rather than full compensation in the event of another sterling devaluation. This would have the effect of reducing the contingent costs of the official roles of the pound: if sterling were devalued, the British would pay less. But note also that unless sterling were in fact devalued, the British would derive no benefit at all from the concession, whereas outer members would meanwhile continue to enjoy a riskless asset earning high rates of interest. In other words, outer members would continue to get something (security) for nothing. From Britain's point of view, this would not be the best possible deal. The best possible deal would take the form of the alternative to direct partial compensation—namely, a concession of interest on sterling-area reserve balances in London. Member countries would agree to forego or remit a designated portion of their interest earnings. This would have the effect of reducing the *current* cost of the reserve-currency role of sterling.

What form should the interest concession take? A whole variety of arrangements may be imagined. Perhaps the easiest one to implement would simply build on the precedent already established by the MSP. Under the terms of the Basle scheme, sterling-area countries must now hold a minimum proportion of their total reserves in sterling. I propose that, in future, they in addition be obliged to invest a fixed proportion of their sterling holdings in noninterest-bearing British Government securities. This might be called the Minimum Noninterest Sterling Pro-

portion (MNSP). Outer members wishing to remain eligible for the exchange guarantee would have to maintain a MNSP as well as a MSP.

Like the MSP, the MNSP could be determined for each country mutually through a process of bilateral negotiation. It could not be set too high: if members were to be unable to earn as much on sterling as on alternative reserve assets (viz., dollars), they would have little incentive to continue using the pound at all. But it could not be set too low either if it is to be worthwhile for the British. Ideally, it might be established as a variable ratio in relation to the moving average of the differential of representative interest yields between London and (say) New York. For example, if at a given time representative interest rates in New York were only half as high as in London, the MNSP might be set at 50 per cent. If rates were then to rise to a level 75 per cent as high as in London, the MNSP could be reduced to 25 per cent; if, on the other hand, they were to decline to just 25 per cent of London's rates, then the MNSP could be raised to 75 per cent; and so on. Probably the ratio would have to be adjusted to include some premium of interest earnings on sterling, as a supplementary incentive to sterling-area members not to opt out of the system. But this would not be asking too much of the British: even then they would be able to save considerably on what it now costs to maintain the pound as a reserve currency.

The standby credit provided through the BIS was another useful precedent established by the Basle arrangement. I propose that this too should be extended beyond 1971, also if possible on a permanent rather than an *ad hoc* basis.

Conceivably, the BIS facility might be replaced by a similar standby from the International Monetary Fund. This could provide for supplementary issues of SDRs when needed to finance withdrawals of sterling-area balances; to match these issues, the United Kingdom would assume a longer-term debt to the Fund. The two alternatives are equivalent insofar as the British are concerned: there is no *a priori* reason for preferring one over the other. However, whichever approach is chosen, it ought to include as well an easing of repayment terms for Britain. The present BIS facility is only medium-term in duration: any drawings made during the first three years are supposed to be fully repaid between the sixth and tenth years (1973-1977). From the British point of view this is an uncomfortably short repayment period, coming on top of an already very heavy load of fixed debts due in the next few years (Appendix A). Consequently, as far as the British are concerned, it would be preferable to lengthen the terms of any renegotiated facility as much as possible. A repayment period of 15-20 years might not be an unrealistic goal. This would certainly have a significant impact in reducing the average annual cost of any funding of official balances that does occur.

Vehicle Currency

At the level of private international transactions, the pound still functions on a global scale as both medium of exchange and store of value. Of course, it is only inside the sterling area that the currency is used really widely; there it predominates. Outside the bloc it is just one of several international currencies. Indeed, to the extent that the pound is still used at all outside the region, it is mainly because of its convenience as a medium for doing business with residents within the limits of the sterling area.

On balance, the global role of the pound as medium of exchange appears to be beneficial rather than costly for the United Kingdom. True, interest charges on private working balances are undoubtedly quite steep. But the related earnings of the City of London and of overseas investments are also high—in fact, probably higher. Accordingly, there hardly seems to be any reason for disturbing this particular function of sterling. On the contrary, there seems to be good reason for preserving it. In my opinion, British policy ought to be directed toward the maintenance of the pound's role as a private exchange intermediary.

Furthermore, in my opinion the object of policy ought to be to maintain this role not merely on a regional scale but, to the extent that it remains today, on a global scale. This would not require Britain, for instance, to restore exchange-control authorization for sterling credits on third-country trade (which was withdrawn in October 1968); on a worldwide basis the pound cannot hope to compete with any success against the more popular dollar. But it would require Britain to protect the convenience nonsterling-area residents now find in using sterling to do business with residents within the bloc. Not only would this preserve all of the net gain to Britain accruing from the pound's medium-of-exchange function for private transactions. It might in addition help in minimizing the net losses from this and other functions at the level of official international transactions. I have argued that the British have no choice but to maintain in some form sterling's official functions within the sterling area. The more widely the pound is used as private vehicle currency, the more likely it is that sterling-area governments will continue to find it convenient for intervention purposes too; and, insofar as this in turn makes the currency a more practical store of value as well, it should ensure continued use as a reserve medium also. In other words, the prospective cost of funding official balances could well be reduced if sterling remains widely used for private trading purposes.

How can British policy help to maintain the private trading role of the pound? Principally it can help by strengthening foreign confidence in

the currency. Sterling today is not widely trusted. After two devaluations in a generation, Britain's pledge of convertibility at a fixed rate of exchange elicits little faith anywhere. Moreover, this is no longer a matter of concern only to nonsterling-area residents. All but a few members of the sterling area have stopped pegging their currencies to the pound; consequently, even residents within the bloc must now be concerned with the matter. The credibility of Britain's convertibility pledge must be enhanced. It is not necessary to convince private transactors that the pound will never be devalued. That would be unrealistic: in a dynamic world, the possibility of a third devaluation (or more) must realistically be conceded. It is only necessary to convince transactors that they need not *worry* about devaluation. This can be accomplished by providing them with some kind of exchange guarantee.

The Basle arrangement established the precedent of an exchange guarantee for the purpose of reforming sterling, though of course that guarantee was intended for official sterling-area balances only. The British Government has always opposed the principle of compensation for private holders, indeed even more adamantly than it traditionally opposed guaranteeing official holders. The latter, the authorities sometimes seemed prepared to concede, perhaps actually might have had a case. A claim to compensation could conceivably have been based on the argument that because of ties of law, loyalty, or politics, official holders were already observing an informal obligation not to convert their pounds into other currencies for speculative reasons. (In fact, this was just the lever the sterling-area countries used to obtain the Basle guarantee in 1968.) Private holders, by contrast, have never felt themselves under any such obligation. They presumably invest in the pound mainly for reasons of convenience or yield. Their exchange risks, insofar as these are not covered in the forward market, are an integral part of their overall business calculations. For them, therefore, an exchange guarantee would be an unwarranted bonus—or so the British Government has always maintained.

Nevertheless, between 1964 and 1967 the Government did in fact provide private transactors with a kind of exchange guarantee—in the form of officially subsidized insurance in the forward-exchange market. As I mentioned, this experiment was discontinued after the devaluation in 1967 and is apparently not to be resumed. However, in my opinion that decision is a mistake. Certainly it is true that the policy of forward intervention resulted in very sizable losses to the Government, owing to the mass of commitments outstanding on the day parity was actually lowered. Forward intervention does have a cost. But it is also true that over the years prior to devaluation, as a partial offset to this cost, the Govern-

ment had earned a considerable profit from supporting the forward rate. Forward intervention has a benefit as well.

This benefit could be regained if the policy of forward intervention were resumed. I propose that it should be resumed. Except in the event of another devaluation, the policy would not cost Britain anything; moreover, even if parity must eventually be lowered again, cumulative profits (assuming the interval to the next devaluation is sufficiently long) could well be enough to make the devaluation loss, in effect, self-financing. And in the meantime, the credibility of Britain's convertibility pledge would be enhanced by the informal exchange guarantee provided through the forward market, thus helping to maintain the private trading role of the pound. As a result, the net gain of this monetary function could continue to accrue to Britain.

By contrast with its trading role, the pound's global role as private store of value appears to be costly for the United Kingdom on balance, rather than the reverse. Indeed, at present it is probably the *most* expensive of any of sterling's uses, specifically because of the contingent cost of the sterling overhang. Accordingly, there hardly seems any reason for preserving this particular function on its present scale, unless its contingent cost could be very significantly reduced.

The contingent cost of sterling's private-asset role has two aspects—first, the potential volatility of foreign holdings of sterling; and second, the effect of this sensitivity in prompting additional speculation (leads and lags) at times of weakening confidence. Both aspects have a common source: the overhang of sterling balances privately held *outside* the sterling area, consisting largely of investments in the United Kingdom. Only these pose any real danger of volatility in the short term. Therefore, only these need concern us here. Nothing at all need be done about private asset holdings *within* the sterling area.

True, private asset holdings of the sterling area do cost the British a small amount of interest annually, but probably this is more than offset by the continued benefit of related investment earnings in the bloc. The important point about these holdings is that they traditionally show little sensitivity to temporary changes of sentiment. They do not add to the independent balance-of-payments constraint affecting British domestic policies. To be sure, there may well have been some increase in the sensitivity of sterling-area private balances since the devaluation of 1967, owing to the windfall losses suffered at the time by many holders. However, even if this has occurred, it adds no real threat to the pound. Joint exchange-control regulations in the sterling area ensure that any net reduction of private balances within the bloc will be matched simply by corresponding net increases of official balances, and the probability of a

matching decrease of official balances is limited by the exchange-guarantee and MSP provisions of the 1968 Basle arrangement. Consequently, very little drain of reserves is likely to result. Moreover, the standby credit facility provided through the BIS is available to meet any net drains that might ensue (though, of course, at a cost). Accordingly, it does not seem necessary to do anything about the asset role of the pound within the sterling area.

On the other hand, it does seem necessary to do something about this role *outside* the sterling area. One idea might be to preserve the role while attempting to reduce its contingent cost. However, this does not appear a very promising approach. Essentially, this was the approach of the British Government between 1964 and 1967, when it was following its policy of active intervention in the forward market. By providing a cheap, informal guarantee for private transactions, the authorities hoped to forestall massive withdrawals at moments of weakening confidence. Unfortunately, in this respect the policy was less than totally successful. Certainly it helped to maintain the attractiveness of the pound as a private exchange intermediary. But it was unable to prevent occasional quite substantial outflows from London. Nonsterling-area residents still found it profitable to speculate against the pound whenever there was the simultaneous possibility of speculating *in favor* of some other currency (such as the Deutsche mark). Indeed, this was an inevitable consequence of the pound's role as a private store of value: so long as it continues to be widely held extra-regionally for asset purposes, the currency must always remain subject to this kind of "backwash" effect. Official support of the forward rate can do nothing about it.

If the contingent cost of the pound's asset role outside the sterling area cannot be reduced significantly, then the role itself must be eliminated. This is the avenue of approach that I recommend. However, in turn this raises a difficult question: how is it possible to reconcile this objective with the simultaneous objective, recommended earlier, of maintaining the pound's extra-regional trading role (to the extent that this latter remains today)? The answer, I believe, is to be found in two of the precedents established by the 1968 Basle arrangement—the MSP provision and the principle of funding on a partial and self-qualifying basis.

Essentially, to reconcile these two objectives it is necessary to identify, within the total of nonsterling-area private balances in London, the line between working balances and investment balances. To eliminate the asset role of the pound outside the sterling region, nonresident investment balances must be liquidated once and for all. But if the trading role is to be maintained, working balances must be allowed to remain. How can we identify the line between the two?

A priori, we probably *cannot* identify the line between the two. On an aggregate basis, the distinction between working balances and investment balances can rarely be decided with any degree of precision. Only the individual owners of the balances can really know for sure. Therefore, what I propose is that the owners themselves be given the responsibility for deciding. That is where the principle of self-qualification comes in. To begin with, the British Government should negotiate to broaden the terms of the 1968 Basle standby (or the IMF substitute for it mentioned earlier) to permit drawings to cover net withdrawals of private nonsterling-area as well as sterling-area balances. This would effectively extend the precedent of partial funding in order to minimize the cost of liquidating the pound's extra-regional asset role. The Government should then establish a time limit within which nonsterling-area residents would be required to liquidate all of their investment balances held in London. The period specified would of course have to be long enough—one or two years, say—to permit investors to sell off their sterling assets with a minimum of capital loss. But the owners of the balances themselves would have full authority to decide which of their holdings are investments and which are really for working purposes. In effect, eligibility for funding would be determined on a genuinely self-qualifying basis.

To ensure that all investment balances will in fact be sold off, the Government should also announce that from the end of the period specified, all remaining nonsterling-area private balances in London will be subject to limitations on their rate of withdrawal outside the sterling area. Holdings would still be freely transferable within the bloc. Sales outside the area, however, would now be limited. This is where the principle underlying the MSP provision comes in. Probably it would not be feasible to apply the same provision exactly: what assets would the minimum proportion apply to? But it should be possible to apply the same *principle* exactly. For instance, the Government could simply limit the rate of withdrawal outside the bloc to some fixed percentage of the outstanding total in any given period—ten per cent in a quarter, say, or perhaps fifty per cent in a year. For larger totals a smaller authorized percentage might apply; for smaller totals, a larger percentage. Alternatively, consecutively smaller percentages of withdrawal might be authorized in successive time periods. Requirements of this kind would be sure to induce nonsterling-area residents to liquidate all of their holdings in London that are not absolutely essential to current or prospective business in the bloc. On the other hand, they would not necessarily have any dampening effect at all on the continued use of sterling for private trading purposes. Therefore, despite the details of this proposal, the pound

should probably remain a convenient medium for doing business with residents of the sterling area.

III. CONCLUSIONS

To summarize, I have argued that so far as the British are concerned, it would be best if sterling were to continue in the future as in the past to serve as international money, at least partially. I come to this conclusion not because the currency's international roles appear to be so advantageous for Britain. Rather, I do so because not one of the possible avenues of return to full "domestication" of the pound appears to be anything but distinctly *disadvantageous*. This is certainly true of the various proposals to fund sterling or integrate it with another currency. Every one of these, over the relevant time horizon, would be more costly than the pound's present status as an international currency. Likewise, this is true of the various proposals to shift the cost of liquidation to others. In fact, it would not be so easy to pass on the burden of the sterling problem; moreover, attempts to do so could be seriously detrimental to British national interests. The idea is just not on.

The only role of the pound which I conclude definitely should be eliminated is the role of private store of value outside the sterling area—by far the most costly of any of sterling's present functions. By contrast, the role of private trading currency, both within the sterling area and (to the extent it remains today) extra-regionally, ought to be preserved: on balance, this brings more gains than losses to the British. At the level of official international transactions, both the intervention and the reserve functions of the pound should be retained within the sterling region. To minimize their costs, some reduction of use may be possible. Total elimination, however, would be inadvisable: that would cost more than the pound's official roles at present.

The basis for reform may be found in the three precedents established by the Basle arrangement of 1968: (1) the exchange guarantee; (2) the principle of limitation on the rate of withdrawal of sterling balances; and (3) the funding of sterling balances on a partial and self-qualifying basis. My own proposals build logically and organically from these.

To begin with, I propose two basic modifications of the Basle arrangement itself. First, parallel to the MSP provision, I suggest that sterling-area countries be required, in addition, to maintain a Minimum Non-interest Sterling Proportion (MNSP). From the British point of view, this would be a fairer price than the overseas members currently pay for their exchange guarantee on reserve balances in London. And second, I suggest that the term of the standby credit facility provided through the BIS be lengthened beyond the present 6-10 years. This would ease any

repayment obligations that the British might subsequently be obliged to assume. The facility should also be broadened to cover net withdrawals of private nonsterling-area as well as sterling-area balances. This would aid in liquidating the extra-regional asset role of the pound. In order to maximize its effectiveness, the entire Basle scheme should be renegotiated on a permanent rather than an *ad hoc* basis.

Second, I propose that the British resume active intervention in the forward-exchange market. This would provide private sterling users with an informal exchange guarantee in the form of a kind of officially subsidized insurance. Consequently, by resolving doubts about Britain's pledge of convertibility at a fixed rate of exchange, it would help to maintain the private trading role of the pound within the sterling area as well as extra-regionally.

Finally, I propose that the British compel a liquidation of all non-sterling-area private investment balances in London. Liquidation would be on a self-qualifying basis. All balances remaining after a specified period would be treated as working balances and made subject to limitations on their rate of withdrawal outside the sterling area. This would effectively terminate sterling's extra-regional role as a private store of value without necessarily diminishing its convenience as a medium for transactions with sterling-area residents.

These proposals may not appear very dramatic. Indeed, after the glory of sterling's past they may seem rather squalid. However, they do at least have the advantage, I believe, of realism. They take into account not only the benefits and costs of sterling's present roles; they also consider the benefits and costs of all other conceivable reforms. As compared with the current situation, the reforms which I propose would bring the greatest possible net gain to the United Kingdom. What price glory, anyway?

APPENDIX A

KNOWN OUTSTANDING FOREIGN DEBT OF THE UNITED KINGDOM, END-JUNE 1969, IN MILLIONS OF DOLLARS

to be repaid:

	<i>July-December</i>	<i>in</i>	<i>in</i>	<i>1972</i>	<i>Deadline</i>
	<i>1969</i>	<i>1970</i>	<i>1971</i>	<i>onwards</i>	<i>for complete</i>
					<i>repayment</i>
<i>United States</i>	159	168	170	3787	
Land Lease ^a	10	10	10	444	2004
Line of credit ^a	62	65	65	2837	2000
Economic Cooperation Administration ^a	12	12	14	221	1983
Mutual Security Agency ^a	1	1	1	38	1987
Export-Import bank ^b	74	80	80	247	1973-76
<i>Canada</i> ^a	19	19	19	828	2000
<i>Portugal</i> ^a	14	12	12	17	1973
<i>Germany</i> ^c	22	22	17	—	1971
<i>Deutsche Bundesbank</i> ^d	—	—	—	50	1972
<i>International Monetary Fund</i>					
May 1965 drawing	400	400	—	—	1970
June 1968 drawing	—	—	—	1400	1971-73
June 1969 drawing ^e	—	—	—	500	1974
TOTAL	614	621	218	6582	

^a Debts incurred during World War II or early postwar years.

^b Credit for purchase of military aircraft and missiles from the United States.

^c Residual debit balance in European Payments Union.

^d Offset loan for British military expenditure in Germany.

^e Additional standby credit available of \$500 million.

Sources: *United Kingdom Balance of Payments, 1969*; *The Economist*, June 28, 1969, p. 61; and *The Times*, July 17, 1969, p. 25.

APPENDIX B

POTENTIAL AVERAGE ANNUAL COST TO THE UNITED KINGDOM OF FUNDING THE STERLING BALANCES:
ALTERNATIVE ESTIMATES^a
(in £ millions)

Repayment period	Annual repayment of principal	Average annual interest cost:				Average total annual cost:			
		2.5% (2)	5% (3)	7.5% (4)	10% (5)	2.5% (1)+(2)	5% (1)+(3)	7.5% (1)+(4)	10% (1)+(5)
10 years	341	47	94	140	188	388	435	481	529
25 years	136	45	89	132	178	181	225	268	314
50 years	68	44	87	130	174	112	155	198	242
100 years	34	43	86	129	172	77	120	163	206

^a Based on sterling balances clearly related to the international roles of the pound, including all private holdings plus the official holdings of countries in the overseas sterling area. At end-1968 these totalled £3,406 million. For the assumptions underlying the calculations, see the accompanying text.

PUBLICATIONS OF THE
INTERNATIONAL FINANCE SECTION

The International Finance Section publishes at irregular intervals papers in four series: **ESSAYS IN INTERNATIONAL FINANCE**, **PRINCETON STUDIES IN INTERNATIONAL FINANCE**, **SPECIAL PAPERS IN INTERNATIONAL ECONOMICS**, and **REPRINTS IN INTERNATIONAL FINANCE**. All four of these should be ordered directly from the Section (P.O. Box 644, Princeton, New Jersey 08540).

A mailing list is maintained for free distribution of **ESSAYS** and **REPRINTS** as they are issued and of announcements of new issues in the series of **STUDIES** and **SPECIAL PAPERS**. Requests for inclusion in this list will be honored, except that students will not be placed on the permanent mailing list, because waste results from frequent changes of address.

For the **STUDIES** and **SPECIAL PAPERS** there will be a charge of \$1.00 a copy, payable in advance. This charge will be waived on copies distributed to college and university libraries here and abroad. In addition the charge is sometimes waived on single copies requested by persons residing abroad who find it difficult to make remittance.

For noneducational institutions there is a simplified procedure whereby all issues of all four series will be sent to them automatically in return for an annual contribution of \$25 to the publication program of the International Finance Section. Any company finding it irksome to order individual **SPECIAL PAPERS** and **STUDIES** is welcome to take advantage of this plan.

Orders for single copies of the **ESSAYS** and **REPRINTS** will be filled against a handling charge of \$1.00, payable in advance. The charge for more than one copy of these two series will be \$0.50 a copy. These charges may be waived to foreign institutions of education and research. Charges may also be waived on single copies requested by persons residing abroad who find it difficult to make remittance.

For the convenience of our British customers, arrangements have been made for retail distribution of the **STUDIES** and **SPECIAL PAPERS** through the Economists' Bookshop, Portugal Street, London, W.C. 2, and Blackwells, Broad Street, Oxford. These booksellers will usually have our publications in stock.

The following is a complete list of the publications of the International Finance Section. The issues of the four series that are still available from the Section are marked by asterisks. Those marked by daggers are out of stock at the International Finance Section but may be obtained in xerographic reproductions (that is, looking like the originals) from University Microfilm, Inc., 300 N. Zeeb Road, Ann Arbor, Michigan 48106. (Most of the issues are priced at \$3.00.)

ESSAYS IN INTERNATIONAL FINANCE

- †No. 1. Friedrich A. Lutz, *International Monetary Mechanisms: The Keynes and White Proposals*. (July 1943)
- † 2. Frank D. Graham, *Fundamentals of International Monetary Policy*. (Autumn 1943)
- † 3. Richard A. Lester, *International Aspects of Wartime Monetary Experience*. (Aug. 1944)
- † 4. Ragnar Nurkse, *Conditions of International Monetary Equilibrium*. (Spring 1945)
- † 5. Howard S. Ellis, *Bilateralism and the Future of International Trade*. (Summer 1945)
- † 6. Arthur I. Bloomfield, *The British Balance-of-Payments Problem*. (Autumn 1945)
- † 7. Frank A. Southard, Jr., *Some European Currency and Exchange Experiences: 1943-1946*. (Summer 1946)
- † 8. Miroslav A. Kriz, *Postwar International Lending*. (Spring 1947)
- † 9. Friedrich A. Lutz, *The Marshall Plan and European Economic Policy*. (Spring 1948)
- † 10. Frank D. Graham, *The Cause and Cure of "Dollar Shortage"*. (Jan. 1949)
- † 11. Horst Mendershausen, *Dollar Shortage and Oil Surplus in 1949-1950*. (Nov. 1950)
- † 12. Sir Arthur Salter, *Foreign Investment*. (Feb. 1951)
- † 13. Sir Roy Harrod, *The Pound Sterling*. (Feb. 1952)
- † 14. S. Herbert Frankel, *Some Conceptual Aspects of International Economic Development of Underdeveloped Territories*. (May 1952)
- † 15. Miroslav A. Kriz, *The Price of Gold*. (July 1952)
- † 16. William Diebold, Jr., *The End of the I.T.O.* (Oct. 1952)
- † 17. Sir Douglas Copland, *Problems of the Sterling Area: With Special Reference to Australia*. (Sept. 1953)
- † 18. Raymond F. Mikesell, *The Emerging Pattern of International Payments*. (April 1954)
- † 19. D. Gale Johnson, *Agricultural Price Policy and International Trade*. (June 1954)
- † 20. Ida Greaves, *"The Colonial Sterling Balances"*. (Sept. 1954)
- † 21. Raymond Vernon, *America's Foreign Trade Policy and the GATT*. (Oct. 1954)
- † 22. Roger Auboin, *The Bank for International Settlements, 1930-1955*. (May 1955)
- † 23. Wytze Gorter, *United States Merchant Marine Policies: Some International Implications*. (June 1955)
- † 24. Thomas C. Schelling, *International Cost-Sharing Arrangements*. (Sept. 1955)
- † 25. James E. Meade, *The Belgium-Luxembourg Economic Union, 1921-1939*. (March 1956)
- † 26. Samuel I. Katz, *Two Approaches to the Exchange-Rate Problem: The United Kingdom and Canada*. (Aug. 1956)
- † 27. A. R. Conan, *The Changing Pattern of International Investment in Selected Sterling Countries*. (Dec. 1956)
- † 28. Fred H. Klopstock, *The International Status of the Dollar*. (May 1957)
- † 29. Raymond Vernon, *Trade Policy in Crisis*. (March 1958)
- † 30. Sir Roy Harrod, *The Pound Sterling, 1951-1958*. (Aug. 1958)
- † 31. Randall Hinshaw, *Toward European Convertibility*. (Nov. 1958)
- † 32. Francis H. Schott, *The Evolution of Latin American Exchange-Rate Policies since World War II*. (Jan. 1959)
- † 33. Alec Cairncross, *The International Bank for Reconstruction and Development*. (March 1959)

- † 34. Miroslav A. Kriz, *Gold in World Monetary Affairs Today*. (June 1959)
- † 35. Sir Donald MacDougall, *The Dollar Problem: A Reappraisal*. (Nov. 1960)
- † 36. Brian Tew, *The International Monetary Fund: Its Present Role and Future Prospect*. (March 1961)
- † 37. Samuel I. Katz, *Sterling Speculation and European Convertibility: 1955-1958*. (Oct. 1961)
- † 38. Boris C. Swerling, *Current Issues in International Commodity Policy*. (June 1962)
- † 39. Pieter Lieftinck, *Recent Trends in International Monetary Policies*. (Sept. 1962)
- † 40. Jerome L. Stein, *The Nature and Efficiency of the Foreign Exchange Market*. (Oct. 1962)
- † 41. Friedrich A. Lutz, *The Problem of International Liquidity and the Multiple-Currency Standard*. (March 1963)
- † 42. Sir Dennis Robertson, *A Memorandum Submitted to the Canadian Royal Commission on Banking and Finance*. (May 1963)
- † 43. Marius W. Holtrop, *Monetary Policy in an Open Economy: Its Objectives, Instruments, Limitations, and Dilemmas*. (Sept. 1963)
- † 44. Harry G. Johnson, *Alternative Guiding Principles for the Use of Monetary Policy*. (Nov. 1963)
- † 45. Jacob Viner, *Problems of Monetary Control*. (May 1964)
- † 46. Charles P. Kindleberger, *Balance-of-Payments Deficits and the International Market for Liquidity*. (May 1965)
- † 47. Jacques Rueff and Fred Hirsch, *The Role and the Rule of Gold: An Argument*. (June 1965)
- † 48. Sidney Weintraub, *The Foreign-Exchange Gap of the Developing Countries*. (Sept. 1965)
- † 49. Tibor Scitovsky, *Requirements of an International Reserve System*. (Nov. 1965)
- † 50. John H. Williamson, *The Crawling Peg*. (Dec. 1965)
- † 51. Pieter Lieftinck, *External Debt and Debt-Bearing Capacity of Developing Countries*. (March 1966)
- † 52. Raymond F. Mikesell, *Public Foreign Capital for Private Enterprise in Developing Countries*. (April 1966)
- † 53. Milton Gilbert, *Problems of the International Monetary System*. (April 1966)
- † 54. Robert V. Roosa and Fred Hirsch, *Reserves, Reserve Currencies, and Vehicle Currencies: An Argument*. (May 1966)
- † 55. Robert Triffin, *The Balance of Payments and the Foreign Investment Position of the United States*. (Sept. 1966)
- † 56. John Parke Young, *United States Gold Policy: The Case for Change*. (Oct. 1966)
- * 57. Gunther Ruff, *A Dollar-Reserve System as a Transitional Solution*. (Jan. 1967)
- * 58. J. Marcus Fleming, *Toward Assessing the Need for International Reserves*. (Feb. 1967)
- * 59. N. T. Wang, *New Proposals for the International Finance of Development*. (April 1967)
- † 60. Miroslav A. Kriz, *Gold: Barbarous Relic or Useful Instrument?* (June 1967)
- * 61. Charles P. Kindleberger, *The Politics of International Money and World Language*. (Aug. 1967)
- * 62. Delbert A. Snider, *Optimum Adjustment Processes and Currency Areas*. (Oct. 1967)
- † 63. Eugene A. Birnbaum, *Changing the United States Commitment to Gold*. (Nov. 1967)
- * 64. Alexander K. Swoboda, *The Euro-Dollar Market: An Interpretation*. (Feb. 1968)

- * 65. Fred H. Klopstock, *The Euro-Dollar Market: Some Unresolved Issues*. (March 1968)
- * 66. Eugene A. Birnbaum, *Gold and the International Monetary System: An Orderly Reform*. (April 1968)
- * 67. J. Marcus Fleming, *Guidelines for Balance-of-Payments Adjustment under the Par-Value System*. (May 1968)
- * 68. George N. Halm, *International Financial Intermediation: Deficits Benign and Malignant*. (June 1968)
- * 69. Albert O. Hirschman and Richard M. Bird, *Foreign Aid—A Critique and a Proposal*. (July 1968)
- * 70. Milton Gilbert, *The Gold-Dollar System: Conditions of Equilibrium and the Price of Gold*. (Nov. 1968)
- * 71. Henry G. Aubrey, *Behind the Veil of International Money*. (Jan. 1969)
- * 72. Anthony Lanyi, *The Case for Floating Exchange Rates Reconsidered*. (Feb. 1969)
- * 73. George N. Halm, *Toward Limited Exchange-Rate Flexibility*. (March 1969)
- * 74. Ronald I. McKinnon, *Private and Official International Money: The Case for the Dollar*. (April 1969)
- * 75. Jack L. Davies, *Gold: A Forward Strategy*. (May 1969)
- * 76. Albert O. Hirschman, *How to Divest in Latin America, and Why*. (Nov. 1969)
- * 77. Benjamin J. Cohen, *The Reform of Sterling*. Dec. 1969

PRINCETON STUDIES IN INTERNATIONAL FINANCE

- †No. 1. Friedrich A. and Vera C. Lutz, *Monetary and Foreign Exchange Policy in Italy*. (Jan. 1950)
- † 2. Eugene R. Schlesinger, *Multiple Exchange Rates and Economic Development*. (May 1952)
- † 3. Arthur I. Bloomfield, *Speculative and Flight Movements of Capital in Postwar International Finance*. (Feb. 1954)
- † 4. Merlyn N. Trued and Raymond F. Mikesell, *Postwar Bilateral Payments Agreements*. (April 1955)
- † 5. Derek Curtis Bok, *The First Three Years of the Schuman Plan*. (Dec. 1955)
- † 6. James E. Meade, *Negotiations for Benelux: An Annotated Chronicle, 1943-1956*. (March 1957)
- † 7. H. H. Liesner, *The Import Dependence of Britain and Western Germany: A Comparative Study*. (Dec. 1957)
- † 8. Raymond F. Mikesell and Jack N. Behrman, *Financing Free World Trade with the Sino-Soviet Bloc*. (Sept. 1958)
- † 9. Marina von Neumann Whitman, *The United States Investment Guaranty Program and Private Foreign Investment*. (Dec. 1959)
- † 10. Peter B. Kenen, *Reserve-Asset Preferences of Central Banks and Stability of the Gold-Exchange Standard*. (June 1963)
- * 11. Arthur I. Bloomfield, *Short-Term Capital Movements under the Pre-1914 Gold Standard*. (July 1963)
- * 12. Robert Triffin, *The Evolution of the International Monetary System: Historical Reappraisal and Future Perspectives*. (June 1964)
- * 13. Robert Z. Aliber, *The Management of the Dollar in International Finance*. (June 1964)
- * 14. Weir M. Brown, *The External Liquidity of an Advanced Country*. (Oct. 1964)
- † 15. E. Ray Canterbury, *Foreign Exchange, Capital Flows, and Monetary Policy*. (June 1965)
- * 16. Ronald I. McKinnon and Wallace E. Oates, *The Implications of International Economic Integration for Monetary, Fiscal, and Exchange-Rate Policy*. (March 1966)
- * 17. Egon Sohmen, *The Theory of Forward Exchange*. (Aug. 1966)

- * 18. Benjamin J. Cohen, *Adjustment Costs and the Distribution of New Reserves*. (Oct. 1966)
- * 19. Marina von Neumann Whitman, *International and Interregional Payments Adjustment: A Synthetic View*. (Feb. 1967)
- * 20. Fred R. Glahe, *An Empirical Study of the Foreign-Exchange Market: Test of A Theory*. (June 1967)
- * 21. Arthur I. Bloomfield, *Patterns of Fluctuation in International Investment Before 1914*. (Dec. 1968)
- * 22. Samuel I. Katz, *External Surpluses, Capital Flows, and Credit Policy in the European Economic Community*. (Feb. 1969)
- * 23. Hans Aufricht, *The Fund Agreement: Living Law and Emerging Practice*. (June 1969)
- * 24. Peter H. Lindert, *Key Currencies and Gold, 1900-1913*. (Aug. 1969)

SPECIAL PAPERS IN INTERNATIONAL ECONOMICS

- *No. 1. Gottfried Haberler, *A Survey of International Trade Theory*. (Sept. 1955; Revised edition, July 1961)
- † 2. Oskar Morgenstern, *The Validity of International Gold Movement Statistics*. (Nov. 1955)
- * 3. Fritz Machlup, *Plans for Reform of the International Monetary System*. (Aug. 1962; Revised edition, March 1964)
- † 4. Egon Sohmen, *International Monetary Problems and the Foreign Exchanges*. (April 1963)
- † 5. Walther Lederer, *The Balance on Foreign Transactions: Problems of Definition and Measurement*. (Sept. 1963)
- * 6. George N. Halm, *The "Band" Proposal: The Limits of Permissible Exchange Rate Variations*. (Jan. 1965)
- * 7. W. M. Corden, *Recent Developments in the Theory of International Trade*. (March 1965)
- * 8. Jagdish Bhagwati, *The Theory and Practice of Commercial Policy: Departures from Unified Exchange Rates*. (Jan. 1968)

REPRINTS IN INTERNATIONAL FINANCE

- †No. 1. Fritz Machlup, *The Cloakroom Rule of International Reserves: Reserve Creation and Resources Transfer*. [Reprinted from *Quarterly Journal of Economics*, Vol. LXXIX (Aug. 1965)]
- † 2. Fritz Machlup, *Real Adjustment, Compensatory Corrections, and Foreign Financing of Imbalances in International Payments*. [Reprinted from Robert E. Baldwin et al., *Trade, Growth, and the Balance of Payments* (Chicago: Rand McNally and Amsterdam: North-Holland Publishing Co., 1965)]
- † 3. Fritz Machlup, *International Monetary Systems and the Free Market Economy*. [Reprinted from *International Payments Problems: A Symposium* (Washington, D.C.: American Enterprise Institute, 1966)]
- * 4. Fritz Machlup, *World Monetary Debate—Bases for Agreement*. [Reprinted from *The Banker*, Vol. 116 (Sept. 1966)]
- * 5. Fritz Machlup, *The Need for Monetary Reserves*. [Reprinted from *Banca Nazionale del Lavoro Quarterly Review*, Vol. 77 (Sept. 1966)]
- * 6. Benjamin J. Cohen, *Voluntary Foreign Investment Curbs: A Plan that Really Works*. [Reprinted from *Challenge: The Magazine of Economic Affairs* (March/April 1967)]
- * 7. Fritz Machlup, *Credit Facilities or Reserve Allotments?* [Reprinted from *Banca Nazionale del Lavoro Quarterly Review*, No. 81 (June 1967)]
- * 8. Fritz Machlup, *From Dormant Liabilities to Dormant Assets*. [Reprinted from *The Banker*, Vol. 117 (Sept. 1967)]
- * 9. Benjamin J. Cohen, *Reparations in the Postwar Period: A Survey*. [Reprinted from *Banca Nazionale del Lavoro Quarterly Review*, No. 82 (Sept. 1967)]

- * 10. Fritz Machlup, *The Price of Gold*. [Reprinted from *The Banker*, Vol. 118 (Sept. 1968)]
- * 11. Fritz Machlup, *The Transfer Gap of the United States*. [Reprinted from *Banca Nazionale del Lavoro Quarterly Review*, No. 86 (Sept. 1968)]
- * 12. Fritz Machlup, *Speculations on Gold Speculation*. [Reprinted from *American Economic Review, Papers and Proceedings*, Vol. LVI (May 1969)]

SEPARATE PUBLICATIONS

- † (1) Klaus Knorr and Gardner Patterson (editors), *A Critique of the Randall Commission Report*. (1954)
- † (2) Gardner Patterson and Edgar S. Furniss Jr. (editors), *NATO: A Critical Appraisal*. (1957)
- * (3) Fritz Machlup and Burton G. Malkiel (editors), *International Monetary Arrangements: The Problem of Choice*. Report on the Deliberations of an International Study Group of 32 Economists. (Aug. 1964) [\$1.00]

AVAILABLE FROM OTHER SOURCES

William Fellner, Fritz Machlup, Robert Triffin, and Eleven Others, *Maintaining and Restoring Balance in International Payments* (1966). [This volume may be ordered from Princeton University Press, Princeton, New Jersey 08540, at a price of \$6.50.]

Fritz Machlup, *Remaking the International Monetary System: The Rio Agreement and Beyond* (1968). [This volume may be ordered from the Johns Hopkins Press, Baltimore, Maryland 21218, at \$6.95 in cloth cover and \$2.45 in paperback.]



